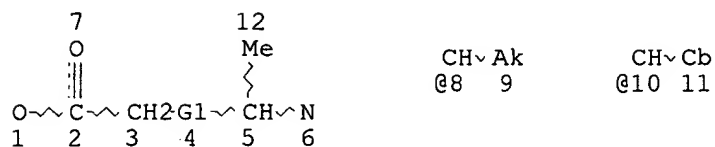


=> d que

L2 SCR 353 AND 2005 AND 1992
 L36 STR



VAR G1=8/10

NODE ATTRIBUTES:

CONNECT IS E2 RC AT 6
 CONNECT IS E1 RC AT 9
 CONNECT IS E1 RC AT 11
 DEFAULT MLEVEL IS ATOM
 GGCAT IS MCY AT 11
 DEFAULT ECLEVEL IS LIMITED
 ECOUNT IS X6 C AT 11

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE

L37 5 SEA FILE=REGISTRY SSS FUL L2 AND L36
 L38 5 SEA FILE=HCAPLUS ABB=ON PLU=ON L37

Claim 1

where:

R2=H

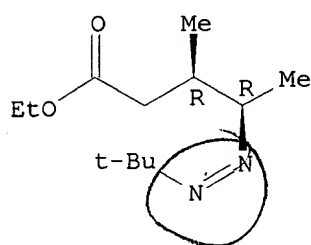
R3=Me

R4=Anything

✓ R1=Alkyl or Carbocycle.

L38 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2002 ACS
 AN 1995:875656 HCAPLUS
 DN 124:86024
 TI Conjugate addition reactions of .alpha.-azoalkylcuprate reagents
 AU Alexander, Christopher W.; Lin, Shou-Yuan; Dieter, R. Karl
 CS H.L. Hunter Laboratory, Department of Chemistry, Clemson University,
 Clemson, SC, 29634-1905, USA
 SO J. Organomet. Chem. (1995), 503(2), 213-20
 CODEN: JORCAI; ISSN: 0022-328X
 DT Journal
 LA English
 OS CASREACT 124:86024
 AB A new class of .alpha.-heteroatomalkyl organocuprate/organocopper reagents
 has been prepd. These .alpha.-azoalkyl cuprate reagents were derived from
 .alpha.-azoalkyl anions and were treated with enones and enoates affording
 .gamma.-azoalkyl carbonyl compds. in modest yields.
 IT 172747-92-1P 172747-96-5P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (conjugate addn. reactions of .alpha.-azoalkylcuprate reagents)
 RN 172747-92-1 HCAPLUS
 CN Pentanoic acid, 4-[(1,1-dimethylethyl)azo]-3-methyl-, ethyl ester,
 (R*,R*)- (9CI) (CA INDEX NAME)

Relative stereochemistry.
 Double bond geometry unknown.

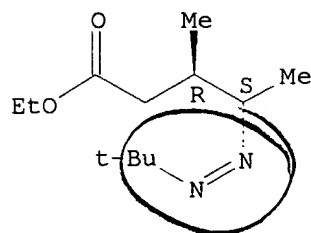


R4 = Et
 R1 = Me

no # in N!

RN 172747-96-5 HCAPLUS
 CN Pentanoic acid, 4-[(1,1-dimethylethyl)azo]-3-methyl-, ethyl ester,
 (R*,S*)- (9CI) (CA INDEX NAME)

Relative stereochemistry.
 Double bond geometry unknown.

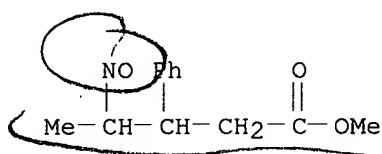


Me

L38 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2002 ACS
 AN 1985:203445 HCAPLUS
 DN 102:203445
 TI Mechanism of the electroreduction of aliphatic nitro compounds.

Preparation of N-hydroxypyrrolidinones by reduction of .gamma.-nitro esters

AU Cariou, Michel; Hazard, Roland; Jubault, Michel; Tallec, Andre
 CS Lab. Electrochim., Univ. Rennes, Rennes, 35042, Fr.
 SO J. Electroanal. Chem. Interfacial Electrochem. (1985), 182(2), 345-54
 CODEN: JEIEBC; ISSN: 0022-0728
 DT Journal
 LA English
 AB N-Hydroxypyrrolidinones are prepd. by electroredn. of .gamma.-nitro esters in very acidic or weakly basic media. In weakly acidic media, nonelectroactive oximes are obtained simultaneously with the expected heterocycles. From exptl. observations, a general scheme is proposed for the redn. of an aliph. nitro group; the formation at the cathode of a two-electron intermediate, different from the nitroso compd., is taken into account.
 IT **96450-99-6**
 RL: PRP (Properties)
 (intermediacy of, in electroredn. of parent nitro compd.)
 RN 96450-99-6 HCAPLUS
 CN Benzenepropanoic acid, .beta.-(1-nitrosoethyl)-, methyl ester (9CI) (CA INDEX NAME)

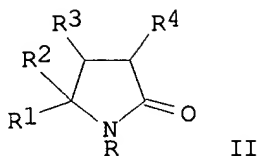
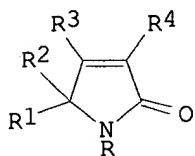


L38 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2002 ACS
 AN 1980:198264 HCAPLUS
 DN 92:198264
 TI 3-Pyrrolin-2-ones and pyrrolidin-2-ones derived from them
 IN Hofer, Peter
 PA Mundipharma A.-G., Switz.
 SO Belg., 23 pp.
 CODEN: BEXXAL
 DT Patent
 LA French
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	BE 876900	A1	19791001	BE 1979-195678	19790611
	IL 57266	A1	19821231	IL 1979-57266	19790514
	JP 54163568	A2	19791226	JP 1979-65082	19790528
	JP 63043387	B4	19880830		
	AT 7903866	A	19831215	AT 1979-3866	19790528
	AU 7947670	A1	19791220	AU 1979-47670	19790601
	AU 529479	B2	19830609		
	ES 481315	A1	19800816	ES 1979-481315	19790606
	CA 1108628	A1	19810908	CA 1979-329322	19790608
	DE 2923553	A1	19791220	DE 1979-2923553	19790609
	DE 2923553	C2	19880601		
	DE 2954236	C2	19881006	DE 1979-2954236	19790609
	DE 2954237	C2	19890921	DE 1979-2954237	19790609
	DK 7902417	A	19791213	DK 1979-2417	19790611
	DK 157847	B	19900226		

DK 157847	C	19900917		
NO 7901943	A	19791213	NO 1979-1943	19790611
SE 7905079	A	19791213	SE 1979-5079	19790611
SE 431644	B	19840220		
SE 431644	C	19840530		
GB 2028307	A	19800305	GB 1979-20275	19790611
GB 2028307	B2	19830119		
FR 2434151	A1	19800321	FR 1979-14907	19790611
FR 2434151	B1	19820430		
FI 7901866	A	19791213	FI 1979-1866	19790612
FI 70209	B	19860228		
FI 70209	C	19860912		
NL 7904584	A	19791214	NL 1979-4584	19790612
ZA 7902895	A	19821124	ZA 1979-2895	19790612
CH 650772	A	19850815	CH 1979-5496	19790612
US 4443616	A	19840417	US 1981-256169	19810421
PRAI US 1978-914682		19780612		
US 1979-12496		19790215		

GI



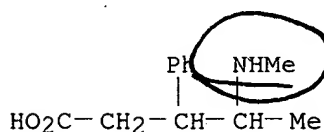
AB Amides R3COCR1R2NRCOCH2R4 [R = H, (un)substituted alkyl, (un)substituted aryl, acyl, aroyl; R1 = H, (un)substituted alkyl, (un)substituted aryl; R2 = H, (un)substituted alkyl; R3 = (un)substituted aryl, (un)substituted alkyl; R4 = H, (un)substituted alkyl, (un)substituted aryl] were heated with KOCMe3 to give the resp. pyrrolinones I, and I were hydrogenated to pyrrolidinones II. A soln. of PhCOCH2NHCOCCH2Ph in Me3COH was added to a heated soln. of KOCMe3 in Me3COH and the mixt. was refluxed 40 min and worked up to yield I (R = R1 = R2 = H, R3 = R4 = Ph).

IT **73082-04-9P**

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

RN 73082-04-9 HCAPLUS

CN Benzenepropanoic acid, .beta.-[1-(methylamino)ethyl]-, hydrochloride (9CI)
(CA INDEX NAME)



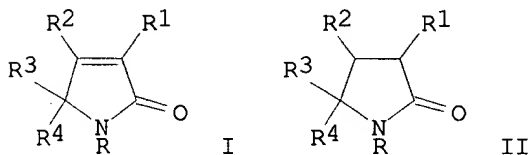
● HCl

*methyl
prop
form amide*

*R4=H
R1=Ph
R2=H
R3=Me
P=H
Q=Me*

L38 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2002 ACS
 AN 1980:128712 HCAPLUS
 DN 92:128712
 TI Pyrrolidin-2-ones from 3-pyrrolin-2-ones, and manufacture of the latter
 PA Mundipharma A.-G., Switz.
 SO Belg., 23 pp.
 CODEN: BEXXAL
 DT Patent
 LA French
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	BE 876900		19791001		
PRAI	US 1978-914682		19780612		
GI					



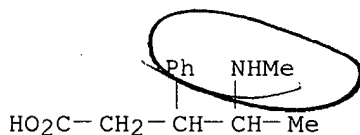
AB Pyrrolinones I (R = H, alkyl, aryl, acyl, aroyl; R1 = H, alkyl, aryl; R2 = alkyl, aryl; R3 = H, alkyl, aryl; R4 = H, alkyl, aryl) were hydrogenated to the resp. II, useful as central nervous system drugs (no data). Thus, PhCOCH2NHCOCH2Ph was heated with KOCMe3 to yield I (R = R3 = R4 = H, R1 = R2 = Ph), and hydrogenation of the product over Pd/C gave II (R = R3 = R4 = H, R1 = R2 = Ph).

IT 73082-04-9P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

RN 73082-04-9 HCAPLUS

CN Benzenepropanoic acid, .beta.-[1-(methylamino)ethyl]-, hydrochloride (9CI)
 (CA INDEX NAME)

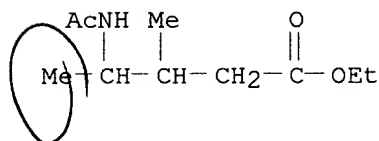


● HCl

L38 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2002 ACS
 AN 1968:68440 HCAPLUS
 DN 68:68440
 TI Free-radical addition of N-acetylaminos to unsaturated compounds
 AU Nikishin, G. I.; Mustafaev, R. I.; Gramenitskaya, V. N.

CS Inst. Org. Khim. im. Zelinskogo, Moscow, USSR
 SO Izv. Akad. Nauk SSSR, Ser. Khim. (1967), (9), 2056-61
 CODEN: IASKA6
 DT Journal
 LA Russian
 GI For diagram(s), see printed CA Issue.
 AB Free radical addn. of N-acetylaminos to unsatd. compds. was reported as a synthetic route to amines with functional groups. The tendency to form 1:1 adducts increased with electrophilicity of the double bond of the reactant. To the acetylamine was added over 6 hrs. at 155-60.degree. a soln. of the appropriate unsatd. compd. C₅H₁₁CH:CH₂, CH₂:CHCH₂OH, its acetate, CH₂:CMeCO₂Me, CH₂:CHCO₂Me, CH₂:CMeCH₂OAc, CH₂:CHOAc, CH₂:CHO₂CPr, MeCH:CHCO₂Me and RO₂CCH:CHCO₂R (R = Me or Et); after 1 hr. at this temp. the mixt. was distd. yielding: AcNHCHMe(CH₂)₃OAc, b_{0.5} 120-1.degree., n_{20D} 1.4543, d₂₀ 1.0311; AcNHCHMeCH₂CHMeCH₂OAc, b_{1.5} 137-8.degree., 1.4553, 1.0122; AcNHCHMe(CH₂)₂OAc, b_{0.5} 108-9.degree., 1.4515, 1.0487; AcNHCHMe(CH₂)₂O₂CPr, b_{0.5} 123-4.degree., 1.4527, 1.0096; AcNHCHMeCHMeCH₂CO₂Et, b_{0.5} 110-11.degree., 1.4575, 1.0189. The following I were prepd. (R, b.p., n_{20D}, and d₂₀ given): C₇H₁₅, b₂ 126-7.degree., 1.4700, 0.9270; (CH₂)₃OH, b₁ 144-7.degree., m. 62.5-3.degree.; (CH₂)₂OAc, b_{0.5} 113-15.degree., 1.4770, 1.0936; (CH₂)₂CO₂Me, b_{0.5} 112-13.degree., 1.4848, 1.0923. Also prepd. was II, b₂ 135-7.degree., n_{20D} 1.4818, d₂₀ 1.0849. Hydrolysis of I and II with KOH gave 2-(.beta.-hydroxyethyl)pyrrolidine, b_{2.5} 57-8.degree., n_{20D} 1.4846, d₂₀ 1.0117, and 2-(.beta.-hydroxyethyl)piperidine (III), b₃ 86-7.degree., m. 38-9.degree.. III formed also by hydrogenation of 2-(.beta.-hydroxyethyl)pyridine.

IT **19432-82-7P**
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)
 RN 19432-82-7 HCAPLUS
 CN Valeric acid, 4-acetamido-3-methyl-, ethyl ester (8CI) (CA INDEX NAME)



Handwritten notes:
 2, 1, 4, 5, 6, 7
 19432-82-7
 8CI
 19432-82-7